

CLAIMS:

- 1 1. A server method for converting objects of a first type into objects of a  
2 second type, the method comprising:
  - 3 a) identifying one or more object classes of the first type;
  - 4 b) determining instance data based on the classes of the first type;
  - 5 c) introspecting each class of the first type;
  - 6 d) automatically creating an artifact representing a software model; and
  - 7 e) generating one or more converters, each converter being based on  
8 the artifact and is configured for receiving the instance data and generating  
9 JavaScript code for recreating the instance from the classes as objects of the  
10 second type, for display on a browser.
- 1 2. The method of claim 1, wherein the objects of the first type are Java-  
2 based objects and the objects of the second class are JavaScript-based  
3 objects.
- 1 3. The method of claim 1 wherein the object classes comprise JavaBeans  
2 and wherein the converters are invoked at runtime to generate JavaScript  
3 code required to recreate instance data from the JavaBeans into objects in the  
4 browser.
- 1 4. The method of claim 3 further comprising determining, for each property in  
2 a class, whether the property is an attribute.

1 5. The method of claim 4 further comprising outputting a JavaScript code for  
2 the value of the attribute.

1 6. The method of claim 4 further comprising creating a buffer to hold an  
2 exported object value or values if the property is an array.

1 7. The method of claim 6 further comprising creating an array to hold  
2 object IDs for the referenced objects for each object in the array.

1 8. The method of claim 7 further comprising computing a signature of the  
2 object if the object is in a map.

1 9. The method of claim 8 further comprising:  
2 calling an object;  
3 generating an export ID;  
4 outputting the JavaScript code to declare the object called as the  
5 converter for the object; and  
6 adding the ID to the array.

1 10. The method of claim 9 further comprising outputting a JavaScript array  
2 to hold the exported IDs.

1 11. The method of claim 9 further comprising computing the signature of  
2 the object check the Map for the signature if the object is already in the map  
3 get its export ID.

1 12. The method of claim 9 further comprising:  
2 calling the converter for the object; and  
3 outputting the buffer for the exported object values.

1 13. An information processing system comprising:  
2 a web server comprising one or more Java objects; and  
3 a program for converting the Java Objects to JavaScript objects;  
4 wherein the program comprises instructions for:  
5 a) identifying one or more object classes of a first type;  
6 b) determining instance data based on the classes of the first type;  
7 c) introspecting each class of the first type;  
8 d) automatically creating an artifact representing a software model; and  
9 e) generating one or more converters, each converter being based on  
10 the artifact and is configured for receiving the instance data and generating  
11 JavaScript code for recreating the instance from the classes as objects of a  
12 second type, for display on a browser.

1 14. A computer readable medium comprising program instructions for:  
2 a) identifying one or more object classes of a first type;  
3 b) determining instance data based on the classes of the first type;  
4 c) introspecting each class of the first type;  
5 d) automatically creating an artifact representing a software model; and  
6 e) generating one or more converters, each converter being based on  
7 the artifact and is configured for receiving the instance data and generating  
8 JavaScript code for recreating the instance from the classes as objects of a  
9 second type, for display on a browser.